

Sequence Listing

<110> Desnoyers, Luc

Eaton, Dan L.

Goddard, Audrey

Godowski, Paul J.

Gurney, Austin L.

Pan, James

Stewart, Timothy A.

Watanabe, Colin K.

Wood, William I.

Zhang, Zemin

<120> SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ACIDS ENCODING THE SAME

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185 190 195  
Glu Met Lys Gly Lys Ser Asp Thr Ser Ser Asn His Ala Val Leu  
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Leu Asp Gly Phe Arg Ser Asp Tyr Ile Ser Asp Glu Ala Leu Glu  
35 40 45  
Ser Leu Pro Gly Phe Lys Glu Ile Val Ser Arg Gly Val Lys Val  
50 55 60  
Asp Tyr Leu Thr Pro Asp Phe Pro Ser Leu Ser Tyr Pro Asn Tyr  
65 70 75  
Tyr Thr Leu Met Thr Gly Arg His Cys Glu Val His Gln Met Ile  
80 85 90  
Gly Asn Tyr Met Trp Asp Pro Thr Thr Asn Lys Ser Phe Asp Ile  
95 100 105  
Gly Val Asn Lys Asp Ser Leu Met Pro Leu Trp Trp Asn Gly Ser

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Pro Thr Tyr Cys Leu Glu Tyr Lys Asn Val Pro Thr Asp Ile Asn		
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Arg Ala Asp Leu Ala Ala Ile Tyr His Glu Arg Ile Asp Val Glu		
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Lys Ala Val Asp Thr Val Leu Lys Tyr Met Thr Lys Trp Ile Gln		
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His Gly Met Thr Asp Ile Phe Trp Met Asp Lys Val Ile Glu Leu		
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Asn Lys Tyr Ile Ser Leu Asn Asp Leu Gln Gln Val Lys Asp Arg		
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Gly Pro Val Val Ser Leu Trp Pro Ala Pro Gly Lys His Ser Glu		
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Arg Glu Gly Trp Gln Arg Gly Trp His Gly Tyr Asp Asn Glu Leu		
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Met Asp Met Arg Gly Ile Phe Leu Ala Phe Gly Pro Asp Phe Lys		
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Ser Asn Phe Arg Ala Ala Pro Ile Arg Ser Val Asp Val Tyr Asn		
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Val Met Cys Asn Val Val Gly Ile Thr Pro Leu Pro Asn Asn Gly		
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35 40 45  
Gln Ala Pro Pro His Leu Leu Ala Arg Gly Ala Lys Trp Gly Gln  
50 55 60  
Ala Leu Pro Val Ala Leu Val Ser Ser Leu Glu Ala Ala Ser His  
65 70 75  
Arg Gly Arg His Glu Arg Pro Ser Ala Thr Thr Gln Cys Pro Val  
80 85 90  
Leu Arg Pro Glu Glu Val Leu Glu Ala Asp Thr His Gln Arg Ser  
95 100 105  
Ile Ser Pro Trp Arg Tyr Arg Val Asp Thr Asp Glu Asp Arg Tyr  
110 115 120  
Pro Gln Lys Leu Ala Phe Ala Glu Cys Leu Cys Arg Gly Cys Ile  
125 130 135  
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<212> PRT

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Phe Gly Gly Cys Ser His Gly Ser Arg Cys Leu Arg Asp Ser Thr  
35 40 45

His Cys Val Thr Thr Ala Thr Arg Val Leu Ser Asn Thr Glu Asp  
50 55 60

Leu Pro Leu Val Thr Lys Met Cys His Ile Gly Cys Pro Asp Ile  
65 70 75

Pro Ser Leu Gly Leu Gly Pro Tyr Val Ser Ile Ala Cys Cys Gln  
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Thr Ser Leu Cys Asn His Asp  
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<212> DNA

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<210> 18  
<211> 273  
<212> PRT  
<213> Homo Sapien

<400> 18  
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Gly His Gly Ala Phe Cys Arg Arg Val Val Ser Gly Gln Lys Val  
20 25 30  
Cys Phe Ala Asp Phe Lys His Pro Cys Tyr Lys Met Ala Tyr Phe  
35 40 45  
His Glu Leu Ser Ser Arg Val Ser Phe Gln Glu Ala Arg Leu Ala  
50 55 60  
Cys Glu Ser Glu Gly Gly Val Leu Leu Ser Leu Glu Asn Glu Ala  
65 70 75  
Glu Gln Lys Leu Ile Glu Ser Met Leu Gln Asn Leu Thr Lys Pro  
80 85 90  
Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg  
95 100 105  
Asn Gly Asp Gly Gln Thr Ser Gly Ala Cys Pro Asp Leu Tyr Gln  
110 115 120  
Trp Ser Asp Gly Ser Asn Ser Gln Tyr Arg Asn Trp Tyr Thr Asp  
125 130 135  
Glu Pro Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln  
140 145 150  
Pro Thr Ala Asn Pro Gly Leu Gly Pro Tyr Leu Tyr Gln Trp  
155 160 165  
Asn Asp Asp Arg Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr

170	175	180
Glu Pro Glu Ile Asn Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu		
185	190	195
Thr Asn Gln Pro Gly Asp Thr His Gln Asn Val Val Val Thr Glu		
200	205	210
Ala Gly Ile Ile Pro Asn Leu Ile Tyr Val Val Ile Pro Thr Ile		
215	220	225
Pro Leu Leu Leu Ile Leu Val Ala Phe Gly Thr Cys Cys Phe		
230	235	240
Gln Met Leu His Lys Ser Lys Gly Arg Thr Lys Thr Ser Pro Asn		
245	250	255
Gln Ser Thr Leu Trp Ile Ser Lys Ser Thr Arg Lys Glu Ser Gly		
260	265	270

Met Glu Val

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<210> 19
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 19
      caccaaccaa ctgccaatcc tggc 24

<210> 20
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 20
      accacattct gatgggtgtc tcctgg 26

<210> 21
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 21
      gggtccctac ctttaccagt ggaatgtatc caggtgttaac atgaaggcac 49

<210> 22
<211> 3824

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<212> DNA

<213> Homo Sapien

<400> 22

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gcgtgaaggg cacagaccgc cttgtaatg tctttctggg cattccattt 200  
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aataaatctt gctactgccc aaaa 3824

<210> 23  
<211> 571  
<212> PRT  
<213> Homo Sapien

<400> 23  
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20 25 30  
Val Ala Gln Pro Glu Val Asp Thr Thr Leu Gly Arg Val Arg Gly  
35 40 45  
Arg Gln Val Gly Val Lys Gly Thr Asp Arg Leu Val Asn Val Phe

50	55	60
Leu Gly Ile Pro Phe Ala Gln Pro Pro Leu Gly Pro Asp Arg Phe		
65	70	75
Ser Ala Pro His Pro Ala Gln Pro Trp Glu Gly Val Arg Asp Ala		
80	85	90
Ser Thr Ala Pro Pro Met Cys Leu Gln Asp Val Glu Ser Met Asn		
95	100	105
Ser Ser Arg Phe Val Leu Asn Gly Lys Gln Gln Ile Phe Ser Val		
110	115	120
Ser Glu Asp Cys Leu Val Leu Asn Val Tyr Ser Pro Ala Glu Val		
125	130	135
Pro Ala Gly Ser Gly Arg Pro Val Met Val Trp Val His Gly Gly		
140	145	150
Ala Leu Ile Thr Gly Ala Ala Thr Ser Tyr Asp Gly Ser Ala Leu		
155	160	165
Ala Ala Tyr Gly Asp Val Val Val Val Thr Val Gln Tyr Arg Leu		
170	175	180
Gly Val Leu Gly Phe Phe Ser Thr Gly Asp Glu His Ala Pro Gly		
185	190	195
Asn Gln Gly Phe Leu Asp Val Val Ala Ala Leu Arg Trp Val Gln		
200	205	210
Glu Asn Ile Ala Pro Phe Gly Gly Asp Leu Asn Cys Val Thr Val		
215	220	225
Phe Gly Gly Ser Ala Gly Gly Ser Ile Ile Ser Gly Leu Val Leu		
230	235	240
Ser Pro Val Ala Ala Gly Leu Phe His Arg Ala Ile Thr Gln Ser		
245	250	255
Gly Val Ile Thr Thr Pro Gly Ile Ile Asp Ser His Pro Trp Pro		
260	265	270
Leu Ala Gln Lys Ile Ala Asn Thr Leu Ala Cys Ser Ser Ser Ser		
275	280	285
Pro Ala Glu Met Val Gln Cys Leu Gln Gln Lys Glu Gly Glu Glu		
290	295	300
Leu Val Leu Ser Lys Lys Leu Lys Asn Thr Ile Tyr Pro Leu Thr		
305	310	315
Val Asp Gly Thr Val Phe Pro Lys Ser Pro Lys Glu Leu Leu Lys		
320	325	330
Glu Lys Pro Phe His Ser Val Pro Phe Leu Met Gly Val Asn Asn		
335	340	345

His	Glu	Phe	Ser	Trp	Leu	Ile	Pro	Arg	Gly	Trp	Gly	Leu	Leu	Asp
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Thr	Met	Glu	Gln	Met	Ser	Arg	Glu	Asp	Met	Leu	Ala	Ile	Ser	Thr
	365								370					375
Pro	Val	Leu	Thr	Ser	Leu	Asp	Val	Pro	Pro	Glu	Met	Met	Pro	Thr
	380								385					390
Val	Ile	Asp	Glu	Tyr	Leu	Gly	Ser	Asn	Ser	Asp	Ala	Gln	Ala	Lys
	395								400					405
Cys	Gln	Ala	Phe	Gln	Glu	Phe	Met	Gly	Asp	Val	Phe	Ile	Asn	Val
	410								415					420
Pro	Thr	Val	Ser	Phe	Ser	Arg	Tyr	Leu	Arg	Asp	Ser	Gly	Ser	Pro
	425								430					435
Val	Phe	Phe	Tyr	Glu	Phe	Gln	His	Arg	Pro	Ser	Ser	Phe	Ala	Lys
	440								445					450
Ile	Lys	Pro	Ala	Trp	Val	Lys	Ala	Asp	His	Gly	Ala	Glu	Gly	Ala
	455								460					465
Phe	Val	Phe	Gly	Gly	Pro	Phe	Leu	Met	Asp	Glu	Ser	Ser	Arg	Leu
	470								475					480
Ala	Phe	Pro	Glu	Ala	Thr	Glu	Glu	Glu	Lys	Gln	Leu	Ser	Leu	Thr
	485								490					495
Met	Met	Ala	Gln	Trp	Thr	His	Phe	Ala	Arg	Thr	Gly	Asp	Pro	Asn
	500								505					510
Ser	Lys	Ala	Leu	Pro	Pro	Trp	Pro	Gln	Phe	Asn	Gln	Ala	Glu	Gln
	515								520					525
Tyr	Leu	Glu	Ile	Asn	Pro	Val	Pro	Arg	Ala	Gly	Gln	Lys	Phe	Arg
	530								535					540
Glu	Ala	Trp	Met	Gln	Phe	Trp	Ser	Glu	Thr	Leu	Pro	Ser	Lys	Ile
	545								550					555
Gln	Gln	Trp	His	Gln	Lys	Gln	Lys	Asn	Arg	Lys	Ala	Gln	Glu	Asp
	560								565					570
Leu														

<210> 24  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 24  
gcaaagctct gcctccttgg cc 22

<210> 25  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 25  
gggtggactg tgctctaattt gacgc 25

<210> 26  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 26  
cgtggcactg ggtttgatc 18

<210> 27  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 27  
gatgcagttc tggtcagaga cgctcccccag caagatacaa cagtg 45

<210> 28  
<211> 1342  
<212> DNA  
<213> Homo Sapien

<400> 28  
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aggatattgc agttttgctg tctatagttc tatgcacagt aacgctattt 100  
cttctacaac taaaattcct caaacctaaa atcaacagct tttatgcctt 150  
tgaagtgaag gatgcaaaag gaagaactgt ttctctgaa aagtataaaag 200  
gcaaaagtttc actagttgta aacgtggcca gtgactgccaa actcacagac 250  
agaaaattact tagggctgaa ggaactgcac aaagagttt gaccatcccc 300  
cttcagcgtg ttggcttttc cctgcaatca gtttggagaa tcggagcccc 350  
gcccaagcaa ggaagttagaa tctttgcaa gaaaaaaacta cggagtaact 400  
ttccccatct tccacaagat taagattcta ggatctgaag gagaacctgc 450  
attttagattt cttgttgatt cttaaaagaa ggaaccaagg tgaaattttt 500

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gaggagccca ttgaagtcat caggcctgac atagcagctc tggtagaca 600  
agtgatcata aaaaagaaag aggatctatg agaatccat tgcgttctca 650  
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attataacat ttgaaaaagt cttcatcaaa aaaaaaaaaaa aa 1342

<210> 29  
<211> 209  
<212> PRT  
<213> Homo Sapien

<400> 29

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Thr	Leu	Phe	Leu	Leu	Gln	Leu	Lys	Phe	Leu	Lys	Pro	Lys	Ile	Asn
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Ser	Phe	Tyr	Ala	Phe	Glu	Val	Lys	Asp	Ala	Lys	Gly	Arg	Thr	Val
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Ser	Leu	Glu	Lys	Tyr	Lys	Gly	Lys	Val	Ser	Leu	Val	Val	Asn	Val
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Ala	Ser	Asp	Cys	Gln	Leu	Thr	Asp	Arg	Asn	Tyr	Leu	Gly	Leu	Lys
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Glu	Leu	His	Lys	Glu	Phe	Gly	Pro	Ser	His	Phe	Ser	Val	Leu	Ala
				95					100					105
Phe	Pro	Cys	Asn	Gln	Phe	Gly	Glu	Ser	Glu	Pro	Arg	Pro	Ser	Lys
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Glu	Val	Glu	Ser	Phe	Ala	Arg	Lys	Asn	Tyr	Gly	Val	Thr	Phe	Pro
					125				130					135
Ile	Phe	His	Lys	Ile	Lys	Ile	Leu	Gly	Ser	Glu	Gly	Glu	Pro	Ala
					140				145					150
Phe	Arg	Phe	Leu	Val	Asp	Ser	Ser	Lys	Lys	Glu	Pro	Arg	Trp	Asn
					155				160					165
Phe	Trp	Lys	Tyr	Leu	Val	Asn	Pro	Glu	Gly	Gln	Val	Val	Lys	Phe
					170				175					180
Trp	Arg	Pro	Glu	Glu	Pro	Ile	Glu	Val	Ile	Arg	Pro	Asp	Ile	Ala
					185				190					195
Ala	Leu	Val	Arg	Gln	Val	Ile	Ile	Lys	Lys	Lys	Glu	Asp	Leu	
					200				205					

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<210> 30
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 30
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<210> 31
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 31
gtatcttgtc aaccctgagg 20

<210> 32
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 32
taaccagagc tgctatgtca ggcc 24

<210> 33

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<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 33  
aggcaaagtt tcactatgg taaacgtggc cagtgactgc caactcacag 50

<210> 34  
<211> 3721  
<212> DNA  
<213> Homo Sapien

<400> 34  
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aaaaaaaaaaaa aaaaaaaaaa a 3721

<210> 35  
<211> 888  
<212> PRT  
<213> Homo Sapien

<400> 35  
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					20				25				30	
Pro	Pro	Pro	Leu	Ser	Val	Ala	Pro	Arg	Asp	Tyr	Leu	Asn	His	Tyr
					35				40				45	
Pro	Val	Phe	Val	Gly	Ser	Gly	Pro	Gly	Arg	Leu	Thr	Pro	Ala	Glu
					50				55				60	
Gly	Ala	Asp	Asp	Leu	Asn	Ile	Gln	Arg	Val	Leu	Arg	Val	Asn	Arg
					65				70				75	
Thr	Leu	Phe	Ile	Gly	Asp	Arg	Asp	Asn	Leu	Tyr	Arg	Val	Glu	Leu
					80				85				90	
Glu	Pro	Pro	Thr	Ser	Thr	Glu	Leu	Arg	Tyr	Gln	Arg	Lys	Leu	Thr
					95				100				105	
Trp	Arg	Ser	Asn	Pro	Ser	Asp	Ile	Asn	Val	Cys	Arg	Met	Lys	Gly
					110				115				120	
Lys	Gln	Glu	Gly	Glu	Cys	Arg	Asn	Phe	Val	Lys	Val	Leu	Leu	Leu
					125				130				135	
Arg	Asp	Glu	Ser	Thr	Leu	Phe	Val	Cys	Gly	Ser	Asn	Ala	Phe	Asn
					140				145				150	
Pro	Val	Cys	Ala	Asn	Tyr	Ser	Ile	Asp	Thr	Leu	Gln	Pro	Val	Gly
					155				160				165	
Asp	Asn	Ile	Ser	Gly	Met	Ala	Arg	Cys	Pro	Tyr	Asp	Pro	Lys	His
					170				175				180	
Ala	Asn	Val	Ala	Leu	Phe	Ser	Asp	Gly	Met	Leu	Phe	Thr	Ala	Thr
					185				190				195	
Val	Thr	Asp	Phe	Leu	Ala	Ile	Asp	Ala	Val	Ile	Tyr	Arg	Ser	Leu
					200				205				210	
Gly	Asp	Arg	Pro	Thr	Leu	Arg	Thr	Val	Lys	His	Asp	Ser	Lys	Trp
					215				220				225	
Phe	Lys	Glu	Pro	Tyr	Phe	Val	His	Ala	Val	Glu	Trp	Gly	Ser	His
					230				235				240	
Val	Tyr	Phe	Phe	Phe	Arg	Glu	Ile	Ala	Met	Glu	Phe	Asn	Tyr	Leu
					245				250				255	
Glu	Lys	Val	Val	Val	Ser	Arg	Val	Ala	Arg	Val	Cys	Lys	Asn	Asp
					260				265				270	
Val	Gly	Gly	Ser	Pro	Arg	Val	Leu	Glu	Lys	Gln	Trp	Thr	Ser	Phe
					275				280				285	
Leu	Lys	Ala	Arg	Leu	Asn	Cys	Ser	Val	Pro	Gly	Asp	Ser	His	Phe
					290				295				300	
Tyr	Phe	Asn	Val	Leu	Gln	Ala	Val	Thr	Gly	Val	Val	Ser	Leu	Gly

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Gly Arg Pro Val Val Leu Ala Val Phe Ser Thr Pro Ser Asn Ser			
320	325	330	
Ile Pro Gly Ser Ala Val Cys Ala Phe Asp Leu Thr Gln Val Ala			
335	340	345	
Ala Val Phe Glu Gly Arg Phe Arg Glu Gln Lys Ser Pro Glu Ser			
350	355	360	
Ile Trp Thr Pro Val Pro Glu Asp Gln Val Pro Arg Pro Arg Pro			
365	370	375	
Gly Cys Cys Ala Ala Pro Gly Met Gln Tyr Asn Ala Ser Ser Ala			
380	385	390	
Leu Pro Asp Asp Ile Leu Asn Phe Val Lys Thr His Pro Leu Met			
395	400	405	
Asp Glu Ala Val Pro Ser Leu Gly His Ala Pro Trp Ile Leu Arg			
410	415	420	
Thr Leu Met Arg His Gln Leu Thr Arg Val Ala Val Asp Val Gly			
425	430	435	
Ala Gly Pro Trp Gly Asn Gln Thr Val Val Phe Leu Gly Ser Glu			
440	445	450	
Ala Gly Thr Val Leu Lys Phe Leu Val Arg Pro Asn Ala Ser Thr			
455	460	465	
Ser Gly Thr Ser Gly Leu Ser Val Phe Leu Glu Glu Phe Glu Thr			
470	475	480	
Tyr Arg Pro Asp Arg Cys Gly Arg Pro Gly Gly Glu Thr Gly			
485	490	495	
Gln Arg Leu Leu Ser Leu Glu Leu Asp Ala Ala Ser Gly Gly Leu			
500	505	510	
Leu Ala Ala Phe Pro Arg Cys Val Val Arg Val Pro Val Ala Arg			
515	520	525	
Cys Gln Gln Tyr Ser Gly Cys Met Lys Asn Cys Ile Gly Ser Gln			
530	535	540	
Asp Pro Tyr Cys Gly Trp Ala Pro Asp Gly Ser Cys Ile Phe Leu			
545	550	555	
Ser Pro Gly Thr Arg Ala Ala Phe Glu Gln Asp Val Ser Gly Ala			
560	565	570	
Ser Thr Ser Gly Leu Gly Asp Cys Thr Gly Leu Leu Arg Ala Ser			
575	580	585	
Leu Ser Glu Asp Arg Ala Gly Leu Val Ser Val Asn Leu Leu Val			
590	595	600	

Thr Ser Ser Val Ala Ala Phe Val Val Gly Ala Val Val Ser Gly  
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 Phe Ser Val Gly Trp Phe Val Gly Leu Arg Glu Arg Arg Glu Leu  
                   620                  625                  630  
 Ala Arg Arg Lys Asp Lys Glu Ala Ile Leu Ala His Gly Ala Gly  
                   635                  640                  645  
 Glu Ala Val Leu Ser Val Ser Arg Leu Gly Glu Arg Arg Ala Gln  
                   650                  655                  660  
 Gly Pro Gly Gly Arg Gly Gly Gly Gly Gly Ala Gly Val  
                   665                  670                  675  
 Pro Pro Glu Ala Leu Leu Ala Pro Leu Met Gln Asn Gly Trp Ala  
                   680                  685                  690  
 Lys Ala Thr Leu Leu Gln Gly Gly Pro His Asp Leu Asp Ser Gly  
                   695                  700                  705  
 Leu Leu Pro Thr Pro Glu Gln Thr Pro Leu Pro Gln Lys Arg Leu  
                   710                  715                  720  
 Pro Thr Pro His Pro His Pro His Ala Leu Gly Pro Arg Ala Trp  
                   725                  730                  735  
 Asp His Gly His Pro Leu Leu Pro Ala Ser Ala Ser Ser Ser Leu  
                   740                  745                  750  
 Leu Leu Leu Ala Pro Ala Arg Ala Pro Glu Gln Pro Pro Ala Pro  
                   755                  760                  765  
 Gly Glu Pro Thr Pro Asp Gly Arg Leu Tyr Ala Ala Arg Pro Gly  
                   770                  775                  780  
 Arg Ala Ser His Gly Asp Phe Pro Leu Thr Pro His Ala Ser Pro  
                   785                  790                  795  
 Asp Arg Arg Arg Val Val Ser Ala Pro Thr Gly Pro Leu Asp Pro  
                   800                  805                  810  
 Ala Ser Ala Ala Asp Gly Leu Pro Arg Pro Trp Ser Pro Pro Pro  
                   815                  820                  825  
 Thr Gly Ser Leu Arg Arg Pro Leu Gly Pro His Ala Pro Pro Ala  
                   830                  835                  840  
 Ala Thr Leu Arg Arg Thr His Thr Phe Asn Ser Gly Glu Ala Arg  
                   845                  850                  855  
 Pro Gly Asp Arg His Arg Gly Cys His Ala Arg Pro Gly Thr Asp  
                   860                  865                  870  
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 Pro Val Pro

<210> 36  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 36  
gaggacctac cggccggaca g 21

<210> 37  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 37  
atacaccccg agtactgctg gcag 24

<210> 38  
<211> 42  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 38  
agacaggcga gcggctgctg agcttgagc tggacgcagc tt 42

<210> 39  
<211> 2014  
<212> DNA  
<213> Homo Sapien

<400> 39  
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cgggcttga ttgtcctgg gtcgcggaga cccgcgcgcc tgccctgcac 150  
gccgggcggc aaccttgca gtcgcgttgg ctgctgcgat cggccggcgg 200  
gtccctgccc aaggctcggc tgcttctgtc cacctcttac acttcttcat 250  
ttatcggtgg atcatttcga gagtccgtct tgtaaatgtt tggactttg 300  
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<210> 40  
<211> 502  
<212> PRT  
<213> Homo Sapien

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20 25 30  
Lys Ser Glu Ile Trp Gly Pro Gly Leu Lys Ala Asp Val Val Leu  
35 40 45  
Pro Ala Arg Tyr Phe Tyr Ile Gln Ala Val Asp Thr Ser Gly Asn  
50 55 60  
Lys Phe Thr Ser Ser Pro Gly Glu Lys Val Phe Gln Val Lys Val  
65 70 75  
Ser Ala Pro Glu Glu Gln Phe Thr Arg Val Gly Val Gln Val Leu  
80 85 90  
Asp Arg Lys Asp Gly Ser Phe Ile Val Arg Tyr Arg Met Tyr Ala  
95 100 105  
Ser Tyr Lys Asn Leu Lys Val Glu Ile Lys Phe Gln Gly Gln His  
110 115 120  
Val Ala Lys Ser Pro Tyr Ile Leu Lys Gly Pro Val Tyr His Glu  
125 130 135  
Asn Cys Asp Cys Pro Leu Gln Asp Ser Ala Ala Trp Leu Arg Glu  
140 145 150  
Met Asn Cys Pro Glu Thr Ile Ala Gln Ile Gln Arg Asp Leu Ala  
155 160 165  
His Phe Pro Ala Val Asp Pro Glu Lys Ile Ala Val Glu Ile Pro  
170 175 180  
Lys Arg Phe Gly Gln Arg Gln Ser Leu Cys His Tyr Thr Leu Lys  
185 190 195  
Asp Asn Lys Val Tyr Ile Lys Thr His Gly Glu His Val Gly Phe  
200 205 210  
Arg Ile Phe Met Asp Ala Ile Leu Leu Ser Leu Thr Arg Lys Val  
215 220 225  
Lys Met Pro Asp Val Glu Leu Phe Val Asn Leu Gly Asp Trp Pro

230	235	240
Leu Glu Lys Lys Lys Ser Asn Ser Asn Ile His Pro Ile Phe Ser		
245	250	255
Trp Cys Gly Ser Thr Asp Ser Lys Asp Ile Val Met Pro Thr Tyr		
260	265	270
Asp Leu Thr Asp Ser Val Leu Glu Thr Met Gly Arg Val Ser Leu		
275	280	285
Asp Met Met Ser Val Gln Ala Asn Thr Gly Pro Pro Trp Glu Ser		
290	295	300
Lys Asn Ser Thr Ala Val Trp Arg Gly Arg Asp Ser Arg Lys Glu		
305	310	315
Arg Leu Glu Leu Val Lys Leu Ser Arg Lys His Pro Glu Leu Ile		
320	325	330
Asp Ala Ala Phe Thr Asn Phe Phe Phe Lys His Asp Glu Asn		
335	340	345
Leu Tyr Gly Pro Ile Val Lys His Ile Ser Phe Phe Asp Phe Phe		
350	355	360
Lys His Lys Tyr Gln Ile Asn Ile Asp Gly Thr Val Ala Ala Tyr		
365	370	375
Arg Leu Pro Tyr Leu Leu Val Gly Asp Ser Val Val Leu Lys Gln		
380	385	390
Asp Ser Ile Tyr Tyr Glu His Phe Tyr Asn Glu Leu Gln Pro Trp		
395	400	405
Lys His Tyr Ile Pro Val Lys Ser Asn Leu Ser Asp Leu Leu Glu		
410	415	420
Lys Leu Lys Trp Ala Lys Asp His Asp Glu Glu Ala Lys Lys Ile		
425	430	435
Ala Lys Ala Gly Gln Glu Phe Ala Arg Asn Asn Leu Met Gly Asp		
440	445	450
Asp Ile Phe Cys Tyr Tyr Phe Lys Leu Phe Gln Glu Tyr Ala Asn		
455	460	465
Leu Gln Val Ser Glu Pro Gln Ile Arg Glu Gly Met Lys Arg Val		
470	475	480
Glu Pro Gln Thr Glu Asp Asp Leu Phe Pro Cys Thr Cys His Arg		
485	490	495
Lys Lys Thr Lys Asp Glu Leu		
500		

<210> 41  
<211> 26

<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 41  
gaaggtggaa attaaattcc aaggc 26

<210> 42  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 42  
cgataagctg ctacagtgc atcg 24

<210> 43  
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<212> DNA  
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<220>  
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<400> 43  
gtgactgtcc tctgcaagat agtgcagcct ggctacggga 40

<210> 44  
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<212> DNA  
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<400> 44  
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gccttgagag atgattttgt gtttgggtca aagggtgtga aatttatgcc 350  
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ggataataat gtcacgaggc atttgataa agtattaaaa agaggagatt 700  
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gcctcatcag gtccagattt ctttccaagg cggacgtttt ctgttggaaat 2000

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 tatgttgtta caaaaagaat aaacggcaat aattgagaaa aaaaa 2395

<210> 45

<211> 310

<212> PRT

<213> Homo Sapien

<400> 45

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Glu	Val	Leu	Gly	Ile	Ala	Val	Phe	Leu	Arg	Gly	Phe	Phe	Pro	Ala
				20				25						30
Pro	Val	Arg	Ser	Ser	Ala	Arg	Ala	Glu	His	Gly	Ala	Glu	Pro	Pro
				35				40						45
Ala	Pro	Glu	Pro	Ser	Ala	Gly	Ala	Ser	Ser	Asn	Trp	Thr	Thr	Leu
				50				55						60
Pro	Pro	Pro	Leu	Phe	Ser	Lys	Val	Val	Ile	Val	Leu	Ile	Asp	Ala
				65				70						75
Leu	Arg	Asp	Asp	Phe	Val	Phe	Gly	Ser	Lys	Gly	Val	Lys	Phe	Met
				80				85						90
Pro	Tyr	Thr	Thr	Tyr	Leu	Val	Glu	Lys	Gly	Ala	Ser	His	Ser	Phe
				95				100						105
Val	Ala	Glu	Ala	Lys	Pro	Pro	Thr	Val	Thr	Met	Pro	Arg	Ile	Lys
				110				115						120
Ala	Leu	Met	Thr	Gly	Ser	Leu	Pro	Gly	Phe	Val	Asp	Val	Ile	Arg
				125				130						135
Asn	Leu	Asn	Ser	Pro	Ala	Leu	Leu	Glu	Asp	Ser	Val	Ile	Arg	Gln
				140				145						150
Ala	Lys	Ala	Ala	Gly	Lys	Arg	Ile	Val	Phe	Tyr	Gly	Asp	Glu	Thr
				155				160						165
Trp	Val	Lys	Leu	Phe	Pro	Lys	His	Phe	Val	Glu	Tyr	Asp	Gly	Thr
				170				175						180

Thr Ser Phe Phe Val Ser Asp Tyr Thr Glu Val Asp Asn Asn Val  
185 190 195  
Thr Arg His Leu Asp Lys Val Leu Lys Arg Gly Asp Trp Asp Ile  
200 205 210  
Leu Ile Leu His Tyr Leu Gly Leu Asp His Ile Gly His Ile Ser  
215 220 225  
Gly Pro Asn Ser Pro Leu Ile Gly Gln Lys Leu Ser Glu Met Asp  
230 235 240  
Ser Val Leu Met Lys Ile His Thr Ser Leu Gln Ser Lys Glu Arg  
245 250 255  
Glu Thr Pro Leu Pro Asn Leu Leu Val Leu Cys Gly Asp His Gly  
260 265 270  
Met Ser Glu Thr Gly Ser His Gly Ala Ser Ser Thr Glu Glu Val  
275 280 285  
Asn Thr Pro Leu Ile Leu Ile Ser Ser Ala Phe Glu Arg Lys Pro  
290 295 300  
Gly Asp Ile Arg His Pro Lys His Val Gln  
305 310

<210> 46

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 46

cgggactttc gctacctgtt gc 22

<210> 47

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 47

catcatattc cacaaaatgc tttggg 26

<210> 48

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 48

ccttcgggga ttcttcccggtccccgttcgttcctctg 38

<210> 49  
<211> 918  
<212> DNA  
<213> Homo Sapien

<400> 49  
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ctgcgctctg cctgacaggg tcccaagccc tgcagtgcta cagcttttag 150  
cacacctact ttggccctt tgacctcagg gccatgaagc tgcccagcat 200  
ctcctgtcct catgagtgct ttgaggctat cctgtctctg gacaccgggt 250  
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gcgggccaga cgcaatcgaa cccggacgctg ctgcccggactactcggt 350  
ggtgcgcggc tgcacaactg acaaattgca cgcacccatc atgactcatg 400  
acgcacccccc caacctgagc caagcacccg acccgccgac gctcagcggc 450  
gccgagtgct acgcctgtat cgggtccac caggatgact gcgctatcgg 500  
caggtcccga cgagtccagt gtcaccagga ccagaccgccc tgcttccagg 550  
gcagtgccag aatgacagtt ggcaatttct cagtcctgt gtacatcaga 600  
acctgccacc ggccctcctg caccaccgag ggcaccacca gcccctggac 650  
agccatcgac ctccagggtc cctgctgtga ggggtacctc tgcaacagga 700  
aatccatgac ccagcccttc accagtgttt cagccaccac ccctccccga 750  
gcactacagg tcctggccct gctcctccca gtcctcctgc tggggggct 800  
ctcagcatag accgccccctc caggatgctg gggacaggc tcacacaccc 850  
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aaagtaagaa ttgcaaaa 918

<210> 50  
<211> 251  
<212> PRT  
<213> Homo Sapien

<400> 50  
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1 5 10 15  
Ala Ala Leu Cys Leu Thr Gly Ser Gln Ala Leu Gln Cys Tyr Ser  
20 25 30

Phe	Glu	His	Thr	Tyr	Phe	Gly	Pro	Phe	Asp	Leu	Arg	Ala	Met	Lys
					35			40					45	
Leu	Pro	Ser	Ile	Ser	Cys	Pro	His	Glu	Cys	Phe	Glu	Ala	Ile	Leu
					50			55					60	
Ser	Leu	Asp	Thr	Gly	Tyr	Arg	Ala	Pro	Val	Thr	Leu	Val	Arg	Lys
					65			70					75	
Gly	Cys	Trp	Thr	Gly	Pro	Pro	Ala	Gly	Gln	Thr	Gln	Ser	Asn	Pro
					80			85					90	
Asp	Ala	Leu	Pro	Pro	Asp	Tyr	Ser	Val	Val	Arg	Gly	Cys	Thr	Thr
					95			100					105	
Asp	Lys	Cys	Asn	Ala	His	Leu	Met	Thr	His	Asp	Ala	Leu	Pro	Asn
					110			115					120	
Leu	Ser	Gln	Ala	Pro	Asp	Pro	Pro	Thr	Leu	Ser	Gly	Ala	Glu	Cys
					125			130					135	
Tyr	Ala	Cys	Ile	Gly	Val	His	Gln	Asp	Asp	Cys	Ala	Ile	Gly	Arg
					140			145					150	
Ser	Arg	Arg	Val	Gln	Cys	His	Gln	Asp	Gln	Thr	Ala	Cys	Phe	Gln
					155			160					165	
Gly	Ser	Gly	Arg	Met	Thr	Val	Gly	Asn	Phe	Ser	Val	Pro	Val	Tyr
					170			175					180	
Ile	Arg	Thr	Cys	His	Arg	Pro	Ser	Cys	Thr	Thr	Glu	Gly	Thr	Thr
					185			190					195	
Ser	Pro	Trp	Thr	Ala	Ile	Asp	Leu	Gln	Gly	Ser	Cys	Cys	Glu	Gly
					200			205					210	
Tyr	Leu	Cys	Asn	Arg	Lys	Ser	Met	Thr	Gln	Pro	Phe	Thr	Ser	Ala
					215			220					225	
Ser	Ala	Thr	Thr	Pro	Pro	Arg	Ala	Leu	Gln	Val	Leu	Ala	Leu	Leu
					230			235					240	
Leu	Pro	Val	Leu	Leu	Leu	Val	Gly	Leu	Ser	Ala				
					245			250						

<210> 51

<211> 3288

<212> DNA

<213> Homo Sapien

<400> 51

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gattggaaa gggaaaggac aaaaaagacc cctggctac acggcgtagg 100

tgcagggttt cctactgctg ttctttatg ctggagctg tggctgtaac 150

caactaggaa ataacgtatg cagcagctat ggctgtcaga gagttgtgct 200

tcccaagaca aaggcaagtc ctgtttctt ttcttttg gggagtgtcc 250  
ttggcagggtt ctgggtttgg acgttattcg gtgactgagg aaacagagaa 300  
aggatcctt gtggtaatc tggcaaagga tctggacta gcagaggggg 350  
agctggctgc aagggaacc agggtggttt ccgatgataa caaacaatac 400  
ctgctcctgg attcacatac cggaatttgc ctcacaatg agaaactgga 450  
ccgagagaag ctgtgtggcc ctaaagagcc ctgtatgctg tatttccaaa 500  
tttaatgga tgatccctt cagattacc gggctgagct gagagtcaagg 550  
gatataaatg atcacgcgcc agtatttcag gacaaagaaa cagtcttaaa 600  
aatatcagaa aatacagctg aaggacacg attagacta gaaagagcac 650  
aggatccaga tggaggactt aacggtatcc aaaactacac gatcagcccc 700  
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tccagagcta gtgttggaca aagcactgga tcgggaggag cagggagac 800  
tcagcttaac cctcacagcg ctggatggtg ggtctccatc caggtctggg 850  
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gttgcccag gctctgtatg agacccaggc tccagaaaac agccccattt 950  
gttcccttat tgttaaggta tggcagaag atgtagactc tggagtcaac 1000  
gcggaagtat cctattcatt tttgatgcc tcagaaaata ttcgaacgac 1050  
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ggaggcctt ctgcaagatg tagggttttgcgtt gacacacaa 1200  
tgacaatccc cctgaactga tcgtatcatc atttccaac tctgttgctg 1250  
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cctactaaaa cttctgtgg agaattttta catcctaatt acagaaggcg 1400  
cgctggacag agagatcaga gccgagtaca acatcactat caccgtcact 1450  
gacttgggga cacccaggct gaaaaccgag cacaacataa cggcctgg 1500  
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ctcaaattta agttattatg caacttcaag cattatttc aagtagtata 2700  
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atctgagggtt ttgattcatt tcagagcttgc catctcatga ttctaatcac 2900  
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tttctacatc atgtatttaa aaagaaaatat ttctctacta ctatgctcat 3050  
gacaaaaatga aacaaagcat attgtgagca atactgaaca tcaataatac 3100

ccttagttta tatacttatt attttatctt taagcatgct acttttactt 3150  
ggccaatatt ttcttatgtt aacttttgct gatgtataaa acagactatg 3200  
ccttataatt gaaataaaaat tataatctgc ctgaaaatga ataaaaataa 3250  
aacatttga aatgtgaaaa aaaaaaaaaa aaaaaaaaa 3288

<210> 52  
<211> 800  
<212> PRT  
<213> Homo Sapien

<400> 52  
Met Ala Val Arg Glu Leu Cys Phe Pro Arg Gln Arg Gln Val Leu  
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Phe Leu Phe Leu Phe Trp Gly Val Ser Leu Ala Gly Ser Gly Phe  
20 25 30  
  
Gly Arg Tyr Ser Val Thr Glu Glu Thr Glu Lys Gly Ser Phe Val  
35 40 45  
  
Val Asn Leu Ala Lys Asp Leu Gly Leu Ala Glu Gly Glu Leu Ala  
50 55 60  
  
Ala Arg Gly Thr Arg Val Val Ser Asp Asp Asn Lys Gln Tyr Leu  
65 70 75  
  
Leu Leu Asp Ser His Thr Gly Asn Leu Leu Thr Asn Glu Lys Leu  
80 85 90  
  
Asp Arg Glu Lys Leu Cys Gly Pro Lys Glu Pro Cys Met Leu Tyr  
95 100 105  
  
Phe Gln Ile Leu Met Asp Asp Pro Phe Gln Ile Tyr Arg Ala Glu  
110 115 120  
  
Leu Arg Val Arg Asp Ile Asn Asp His Ala Pro Val Phe Gln Asp  
125 130 135  
  
Lys Glu Thr Val Leu Lys Ile Ser Glu Asn Thr Ala Glu Gly Thr  
140 145 150  
  
Ala Phe Arg Leu Glu Arg Ala Gln Asp Pro Asp Gly Gly Leu Asn  
155 160 165  
  
Gly Ile Gln Asn Tyr Thr Ile Ser Pro Asn Ser Phe Phe His Ile  
170 175 180  
  
Asn Ile Ser Gly Gly Asp Glu Gly Met Ile Tyr Pro Glu Leu Val  
185 190 195  
  
Leu Asp Lys Ala Leu Asp Arg Glu Glu Gln Gly Glu Leu Ser Leu  
200 205 210  
  
Thr Leu Thr Ala Leu Asp Gly Gly Ser Pro Ser Arg Ser Gly Thr  
215 220 225

Ser Thr Val Arg Ile Val Val Leu Asp Val Asn Asp Asn Ala Pro  
 230 235 240  
 Gln Phe Ala Gln Ala Leu Tyr Glu Thr Gln Ala Pro Glu Asn Ser  
 245 250 255  
 Pro Ile Gly Phe Leu Ile Val Lys Val Trp Ala Glu Asp Val Asp  
 260 265 270  
 Ser Gly Val Asn Ala Glu Val Ser Tyr Ser Phe Phe Asp Ala Ser  
 275 280 285  
 Glu Asn Ile Arg Thr Thr Phe Gln Ile Asn Pro Phe Ser Gly Glu  
 290 295 300  
 Ile Phe Leu Arg Glu Leu Leu Asp Tyr Glu Leu Val Asn Ser Tyr  
 305 310 315  
 Lys Ile Asn Ile Gln Ala Met Asp Gly Gly Gly Leu Ser Ala Arg  
 320 325 330  
 Cys Arg Val Leu Val Glu Val Leu Asp Thr Asn Asp Asn Pro Pro  
 335 340 345  
 Glu Leu Ile Val Ser Ser Phe Ser Asn Ser Val Ala Glu Asn Ser  
 350 355 360  
 Pro Glu Thr Pro Leu Ala Val Phe Lys Ile Asn Asp Arg Asp Ser  
 365 370 375  
 Gly Glu Asn Gly Lys Met Val Cys Tyr Ile Gln Glu Asn Leu Pro  
 380 385 390  
 Phe Leu Leu Lys Pro Ser Val Glu Asn Phe Tyr Ile Leu Ile Thr  
 395 400 405  
 Glu Gly Ala Leu Asp Arg Glu Ile Arg Ala Glu Tyr Asn Ile Thr  
 410 415 420  
 Ile Thr Val Thr Asp Leu Gly Thr Pro Arg Leu Lys Thr Glu His  
 425 430 435  
 Asn Ile Thr Val Leu Val Ser Asp Val Asn Asp Asn Ala Pro Ala  
 440 445 450  
 Phe Thr Gln Thr Ser Tyr Thr Leu Phe Val Arg Glu Asn Asn Ser  
 455 460 465  
 Pro Ala Leu His Ile Gly Ser Val Ser Ala Thr Asp Arg Asp Ser  
 470 475 480  
 Gly Thr Asn Ala Gln Val Thr Tyr Ser Leu Leu Pro Pro Gln Asp  
 485 490 495  
 Pro His Leu Pro Leu Ala Ser Leu Val Ser Ile Asn Ala Asp Asn  
 500 505 510  
 Gly His Leu Phe Ala Leu Arg Ser Leu Asp Tyr Glu Ala Leu Gln

	515	520	525
Ala Phe Glu Phe Arg Val Gly Ala Thr Asp Arg Gly Ser Pro Ala			
530	535	540	
Leu Ser Arg Glu Ala Leu Val Arg Val Leu Val Leu Asp Ala Asn			
545	550	555	
Asp Asn Ser Pro Phe Val Leu Tyr Pro Leu Gln Asn Gly Ser Ala			
560	565	570	
Pro Cys Thr Glu Leu Val Pro Arg Ala Ala Glu Pro Gly Tyr Leu			
575	580	585	
Val Thr Lys Val Val Ala Val Asp Gly Asp Ser Gly Gln Asn Ala			
590	595	600	
Trp Leu Ser Tyr Gln Leu Leu Lys Ala Thr Glu Pro Gly Leu Phe			
605	610	615	
Gly Val Trp Ala His Asn Gly Glu Val Arg Thr Ala Arg Leu Leu			
620	625	630	
Ser Glu Arg Asp Ala Ala Lys His Arg Leu Val Val Leu Val Lys			
635	640	645	
Asp Asn Gly Glu Pro Pro Arg Ser Ala Thr Ala Thr Leu His Leu			
650	655	660	
Leu Leu Val Asp Gly Phe Ser Gln Pro Tyr Leu Pro Leu Pro Glu			
665	670	675	
Ala Ala Pro Ala Gln Ala Gln Ala Glu Ala Asp Leu Leu Thr Val			
680	685	690	
Tyr Leu Val Val Ala Leu Ala Ser Val Ser Ser Leu Phe Leu Leu			
695	700	705	
Ser Val Leu Leu Phe Val Ala Val Arg Leu Cys Arg Arg Ser Arg			
710	715	720	
Ala Ala Ser Val Gly Arg Cys Ser Val Pro Glu Gly Pro Phe Pro			
725	730	735	
Gly His Leu Val Asp Val Arg Gly Ala Glu Thr Leu Ser Gln Ser			
740	745	750	
Tyr Gln Tyr Glu Val Cys Leu Thr Gly Gly Pro Gly Thr Ser Glu			
755	760	765	
Phe Lys Phe Leu Lys Pro Val Ile Ser Asp Ile Gln Ala Gln Gly			
770	775	780	
Pro Gly Arg Lys Gly Glu Glu Asn Ser Thr Phe Arg Asn Ser Phe			
785	790	795	
Gly Phe Asn Ile Gln			
800			

<210> 53  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 53  
ctggggagtg tccttggcag gttc 24

<210> 54  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 54  
cagatacacag ggctcttttag ggcacac 27

<210> 55  
<211> 46  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 55  
cggtgactga ggaaacagag aaaggatcct ttgtggtcaa tctggc 46

<210> 56  
<211> 2242  
<212> DNA  
<213> Homo Sapien

<220>  
<221> unsure  
<222> 2181  
<223> unknown base

<400> 56  
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tataccagcc tcgtcttcct tccggggac aacgtgggtc agggcacaga 100  
gagatattta atgtcacccct cttggggctt tcatgggact ccctctgcca 150  
cattttttgg aggttgggaa agttgctaga ggcttcagaa ctccagccta 200  
atggatccca aactcgggag aatggctgctg tccctgctgg ctgtgctgct 250  
gctgctgctg gagcgcggca tgttctcctc accctccccg ccccccggcgc 300  
tgttagagaa agtcttccag tacattgacc tccatcagga tgaatttgtg 350

cagacgctga aggagtgggt ggcacatcgag agcgactctg tccagcctgt 400  
gcctcgcttc agacaagagc tcttcagaat gatggccgtg gctgcggaca 450  
cgctgcagcg cctgggggcc cgtgtggcct cggtggacat gggtcctcag 500  
cagctgcccgc atggtcagag tcttccaata cctccgtca tcctggccga 550  
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acgtgcagcc tgctgaccgg ggcgatgggt ggctcacgga cccctatgtg 650  
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catccttcattt gaaccaatgg ctgatcttgt tgctcttc ggttagcctgg 1050  
tagactcgtc tggtcataatc ctggccctg gaatctatga tgaagtgggtt 1100  
cctcttacag aagagggaaat aaatacatac aaagccatcc atctagaccc 1150  
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aaatatccag agaatttggg tctagtatag tacattttcc cttccattta 1850  
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atcattccat ccaatgatcg ccttgcttt accactctt ccttttatct 2150  
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<210> 57

<211> 507

<212> PRT

<213> Homo Sapien

<400> 57

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					20			25						30
Pro	Pro	Ala	Leu	Leu	Glu	Lys	Val	Phe	Gln	Tyr	Ile	Asp	Leu	His
					35			40						45
Gln	Asp	Glu	Phe	Val	Gln	Thr	Leu	Lys	Glu	Trp	Val	Ala	Ile	Glu
				50				55						60
Ser	Asp	Ser	Val	Gln	Pro	Val	Pro	Arg	Phe	Arg	Gln	Glu	Leu	Phe
				65				70						75
Arg	Met	Met	Ala	Val	Ala	Ala	Asp	Thr	Leu	Gln	Arg	Leu	Gly	Ala
				80				85						90
Arg	Val	Ala	Ser	Val	Asp	Met	Gly	Pro	Gln	Gln	Leu	Pro	Asp	Gly
				95				100						105
Gln	Ser	Leu	Pro	Ile	Pro	Pro	Val	Ile	Leu	Ala	Glu	Leu	Gly	Ser
				110				115						120
Asp	Pro	Thr	Lys	Gly	Thr	Val	Cys	Phe	Tyr	Gly	His	Leu	Asp	Val
				125				130						135
Gln	Pro	Ala	Asp	Arg	Gly	Asp	Gly	Trp	Leu	Thr	Asp	Pro	Tyr	Val
				140				145						150
Leu	Thr	Glu	Val	Asp	Gly	Lys	Leu	Tyr	Gly	Arg	Gly	Ala	Thr	Asp
				155				160						165
Asn	Lys	Gly	Pro	Val	Leu	Ala	Trp	Ile	Asn	Ala	Val	Ser	Ala	Phe

170	175	180
Arg Ala Leu Glu Gln Asp Leu Pro Val Asn Ile Lys Phe Ile Ile		
185	190	195
Glu Gly Met Glu Glu Ala Gly Ser Val Ala Leu Glu Glu Leu Val		
200	205	210
Glu Lys Glu Lys Asp Arg Phe Phe Ser Gly Val Asp Tyr Ile Val		
215	220	225
Ile Ser Asp Asn Leu Trp Ile Ser Gln Arg Lys Pro Ala Ile Thr		
230	235	240
Tyr Gly Thr Arg Gly Asn Ser Tyr Phe Met Val Glu Val Lys Cys		
245	250	255
Arg Asp Gln Asp Phe His Ser Gly Thr Phe Gly Gly Ile Leu His		
260	265	270
Glu Pro Met Ala Asp Leu Val Ala Leu Leu Gly Ser Leu Val Asp		
275	280	285
Ser Ser Gly His Ile Leu Val Pro Gly Ile Tyr Asp Glu Val Val		
290	295	300
Pro Leu Thr Glu Glu Glu Ile Asn Thr Tyr Lys Ala Ile His Leu		
305	310	315
Asp Leu Glu Glu Tyr Arg Asn Ser Ser Arg Val Glu Lys Phe Leu		
320	325	330
Phe Asp Thr Lys Glu Glu Ile Leu Met His Leu Trp Arg Tyr Pro		
335	340	345
Ser Leu Ser Ile His Gly Ile Glu Gly Ala Phe Asp Glu Pro Gly		
350	355	360
Thr Lys Thr Val Ile Pro Gly Arg Val Ile Gly Lys Phe Ser Ile		
365	370	375
Arg Leu Val Pro His Met Asn Val Ser Ala Val Glu Lys Gln Val		
380	385	390
Thr Arg His Leu Glu Asp Val Phe Ser Lys Arg Asn Ser Ser Asn		
395	400	405
Lys Met Val Val Ser Met Thr Leu Gly Leu His Pro Trp Ile Ala		
410	415	420
Asn Ile Asp Asp Thr Gln Tyr Leu Ala Ala Lys Arg Ala Ile Arg		
425	430	435
Thr Val Phe Gly Thr Glu Pro Asp Met Ile Arg Asp Gly Ser Thr		
440	445	450
Ile Pro Ile Ala Lys Met Phe Gln Glu Ile Val His Lys Ser Val		
455	460	465

Val Leu Ile Pro Leu Gly Ala Val Asp Asp Gly Glu His Ser Gln  
470 475 480

Asn Glu Lys Ile Asn Arg Trp Asn Tyr Ile Glu Gly Thr Lys Leu  
485 490 495

Phe Ala Ala Phe Phe Leu Glu Met Ala Gln Leu His  
500 505

<210> 58  
<211> 1470  
<212> DNA  
<213> Homo Sapien

<400> 58  
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ctttgtcatg ggacctgtgc gggtggaaat attgcttttc cttttttgg 150  
ccgtgcacga ggcttggct gggatgttga aggaggagga cgatgacaca 200  
gaacgcttgc ccagcaaatg cgaagtgtgt aagctgctga gcacagagct 250  
acaggcggaa ctgagtcgca ccggtcgatc tcgagaggtg ctggagctgg 300  
ggcaggtgct ggatacaggc aagaggaaga gacacgtgcc ttacagcggtt 350  
tcagagacaa ggcttggaaaga ggccttagag aatttatgtg agcggatcct 400  
ggactatagt gttcacgctg agcgcaaggg ctcactgaga tatgccaagg 450  
gtcagagtca gaccatggca acactgaaag gcctagtgca gaagggggtg 500  
aagggtggatc tggggatccc tctggagctt tggggatgagc ccagcgtgga 550  
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acattgtggg agactggtagt ttccaccatc aggagcagcc cctacaaaat 650  
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gggaggaaga gcaggaggag gaggaggaag aggaggaaga ggaagggggta 800  
gacaagatga ccaagacagg aagccacccc aaacttgacc gagaagatct 850  
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tctaaagcct gcactctccc tgctccacag ctttcagggt gtgtttatga 950  
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gatcctggtg aaacacgcatg acatggcttc tgggggtggag ggtgggggtg 1050  
gaggtcctgc tcctagagat gaactctatc cagcccccta attggcaggt 1100

gtatgtgctg acagtaactga aagtttcct ctttaactga tcccaccc 1150  
accaaaaagt cagcagtggc actggagctg tgggcttgg ggaagtcact 1200  
tagctccta aggtctgtt ttagaccctt ccaaggaaga ggccagaacg 1250  
gacattctct gcgatctata tacattgcct gtatccagga ggctacacac 1300  
cagcaaaccg tgaaggagaa tggcacactg ggtcatggcc tggagttgct 1350  
gataattnag gtgggataga tacttggtct acttaagctc aatgtaaacc 1400  
agagcccacc atatagtttt ataggtgctc aactttctat atcgctatta 1450  
aacttttttc tttttttcta 1470

<210> 59

<211> 248

<212> PRT

<213> Homo Sapien

<400> 59

Met Gly Pro Val Arg Leu Gly Ile Leu Leu Phe Leu Phe Leu Ala  
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Val His Glu Ala Trp Ala Gly Met Leu Lys Glu Glu Asp Asp Asp  
20 25 30

Thr Glu Arg Leu Pro Ser Lys Cys Glu Val Cys Lys Leu Leu Ser  
35 40 45

Thr Glu Leu Gln Ala Glu Leu Ser Arg Thr Gly Arg Ser Arg Glu  
50 55 60

Val Leu Glu Leu Gly Gln Val Leu Asp Thr Gly Lys Arg Lys Arg  
65 70 75

His Val Pro Tyr Ser Val Ser Glu Thr Arg Leu Glu Glu Ala Leu  
80 85 90

Glu Asn Leu Cys Glu Arg Ile Leu Asp Tyr Ser Val His Ala Glu  
95 100 105

Arg Lys Gly Ser Leu Arg Tyr Ala Lys Gly Gln Ser Gln Thr Met  
110 115 120

Ala Thr Leu Lys Gly Leu Val Gln Lys Gly Val Lys Val Asp Leu  
125 130 135

Gly Ile Pro Leu Glu Leu Trp Asp Glu Pro Ser Val Glu Val Thr  
140 145 150

Tyr Leu Lys Lys Gln Cys Glu Thr Met Leu Glu Glu Phe Glu Asp  
155 160 165

Ile Val Gly Asp Trp Tyr Phe His His Gln Glu Gln Pro Leu Gln  
170 175 180

Asn Phe Leu Cys Glu Gly His Val Leu Pro Ala Ala Glu Thr Ala  
185 190 195  
Cys Leu Gln Glu Thr Trp Thr Gly Lys Glu Ile Thr Asp Gly Glu  
200 205 210  
Glu Lys Thr Glu Gly Glu Glu Gln Glu Glu Glu Glu Glu Glu  
215 220 225  
Glu Glu Glu Gly Asp Lys Met Thr Lys Thr Gly Ser His  
230 235 240  
Pro Lys Leu Asp Arg Glu Asp Leu  
245

<210> 60  
<211> 890  
<212> DNA  
<213> Homo Sapien

<400> 60  
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tggagacgag gatgagaaca gcccgtgtgc ccatgaggcc ctcttggacg 200  
aggacaccct ctttgccag ggccttgaag ttttctaccc agagttgggg 250  
aacattggct gcaagggttgt tcctgattgt aacaactaca gacagaagat 300  
cacctcctgg atggagccga tagtcaagtt cccgggggcc gtggacggcg 350  
caacctatat cctggtgatg gtggatccag atgcccctag cagagcagaa 400  
cccagacaga gattctggag acattggctg gtaacagata tcaagggcgc 450  
cgacctgaag aaagggaaaga ttcagggcca ggagttatca gcctaccagg 500  
ctccctcccc accggcacac agtggcttcc atcgctacca gttcttgtc 550  
tatcttcagg aaggaaaagt catctcttc cttcccaagg aaaacaaaac 600  
tcgaggctct tggaaaatgg acagatttct gaaccgcctc cacctggcg 650  
aacctgaagc aagcacccag ttcatgaccc agaactacca ggactcacca 700  
accctccagg ctcccagagg aagggccagc gagcccaagc aaaaaaccag 750  
gcagagatag ctgcctgcta gatagccggc tttgccatcc gggcatgtgg 800  
ccacactgct caccaccgac gatgtggta tggaaccccc tctggataca 850  
gaacccttc tttccaaat taaaaaaaaa aatcatcaaa 890

<210> 61

<211> 223  
 <212> PRT  
 <213> Homo Sapien

<400> 61

Met	Gly	Trp	Thr	Met	Arg	Leu	Val	Thr	Ala	Ala	Leu	Leu	Gly
1				5				10					15

Leu Met Met Val Val Thr Gly Asp Glu Asp Glu Asn Ser Pro Cys  
 20 25 30

Ala His Glu Ala Leu Leu Asp Glu Asp Thr Leu Phe Cys Gln Gly  
 35 40 45

Leu Glu Val Phe Tyr Pro Glu Leu Gly Asn Ile Gly Cys Lys Val  
 50 55 60

Val Pro Asp Cys Asn Asn Tyr Arg Gln Lys Ile Thr Ser Trp Met  
 65 70 75

Glu Pro Ile Val Lys Phe Pro Gly Ala Val Asp Gly Ala Thr Tyr  
 80 85 90

Ile Leu Val Met Val Asp Pro Asp Ala Pro Ser Arg Ala Glu Pro  
 95 100 105

Arg Gln Arg Phe Trp Arg His Trp Leu Val Thr Asp Ile Lys Gly  
 110 115 120

Ala Asp Leu Lys Lys Gly Lys Ile Gln Gly Gln Glu Leu Ser Ala  
 125 130 135

Tyr Gln Ala Pro Ser Pro Pro Ala His Ser Gly Phe His Arg Tyr  
 140 145 150

Gln Phe Phe Val Tyr Leu Gln Glu Gly Lys Val Ile Ser Leu Leu  
 155 160 165

Pro Lys Glu Asn Lys Thr Arg Gly Ser Trp Lys Met Asp Arg Phe  
 170 175 180

Leu Asn Arg Phe His Leu Gly Glu Pro Glu Ala Ser Thr Gln Phe  
 185 190 195

Met Thr Gln Asn Tyr Gln Asp Ser Pro Thr Leu Gln Ala Pro Arg  
 200 205 210

Gly Arg Ala Ser Glu Pro Lys His Lys Thr Arg Gln Arg  
 215 220

<210> 62  
 <211> 1321  
 <212> DNA  
 <213> Homo Sapien

<400> 62  
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aggcactcca ggagacgctg atggtgagg aagggccgtc tatcaatcaa 150  
tcactgttgc tgttatcaca tgcaagtatc cagaggctct tgagcaaggc 200  
agaggggatc ccatttattt gggaatccag aatccagaaa tgtgtttgta 250  
tttgtgagaag gttggagaac agcccacatt gcagctaaaa gagcagaaga 300  
tcatggatct gtatggccaa cccgagcccg tgaaacccctt cctttctac 350  
cgtgccaaga ctggtaggac ctccacccctt gagtctgtgg cttcccgga 400  
ctggttcatt gcctcctcca agagagacca gcccatcatt ctgacttcag 450  
aacttggaa gtcatacaac actgccttg aattaaatat aaatgactga 500  
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caatgtgtt tcgtctacat tttcttagtg tcattttcac gctggtgctg 600  
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caattacttc atagcaactg aagaacagga tgtggcctca gaagcaggag 700  
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aggcatctgc atgagtgact ttaagactca aagaccaaac actgagctt 800  
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gatggcatga ctagcacaga gctgatctct gtttctgtt tgctttattc 900  
cctctggga tgatatcatc cagtcttat atgttgccaa tatacctcat 950  
tgtgtgtaat agaaccttct tagcattaag accttgtaaa caaaaataat 1000  
tcttgggttg ggtatgaaga tgcttcagag ctcatgcgcg ttacccacga 1050  
tggcatgact agcacagagc tgatctctgt ttctgttttgc ttatttccc 1100  
tcttggatg atatcatcca gtcttataat gttgccaata tacctcatttgc 1150  
tgtgtatag aaccttctta gcattaagac cttgtaaaca aaaataattc 1200  
ttgtgttaag ttaaatcatt tttgtcctaa ttgtatgtg taatcttaaa 1250  
gttaaataaaa ctttgtgtat ttatataata ataaagctaa aactgatata 1300  
aaataaagaa agagtaaact g 1321

<210> 63  
<211> 134  
<212> PRT

<213> Homo Sapien

<400> 63

Met	Arg	Gly	Thr	Pro	Gly	Asp	Ala	Asp	Gly	Gly	Arg	Ala	Val	
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Tyr	Gln	Ser	Ile	Thr	Val	Ala	Val	Ile	Thr	Cys	Lys	Tyr	Pro	Glu
				20				25			30			
Ala	Leu	Glu	Gln	Gly	Arg	Gly	Asp	Pro	Ile	Tyr	Leu	Gly	Ile	Gln
				35				40			45			
Asn	Pro	Glu	Met	Cys	Leu	Tyr	Cys	Glu	Lys	Val	Gly	Glu	Gln	Pro
				50				55			60			
Thr	Leu	Gln	Leu	Lys	Glu	Gln	Lys	Ile	Met	Asp	Leu	Tyr	Gly	Gln
				65				70			75			
Pro	Glu	Pro	Val	Lys	Pro	Phe	Leu	Phe	Tyr	Arg	Ala	Lys	Thr	Gly
				80				85			90			
Arg	Thr	Ser	Thr	Leu	Glu	Ser	Val	Ala	Phe	Pro	Asp	Trp	Phe	Ile
				95				100			105			
Ala	Ser	Ser	Lys	Arg	Asp	Gln	Pro	Ile	Ile	Leu	Thr	Ser	Glu	Leu
				110				115			120			
Gly	Lys	Ser	Tyr	Asn	Thr	Ala	Phe	Glu	Leu	Asn	Ile	Asn	Asp	
				125				130						

<210> 64

<211> 999

<212> DNA

<213> Homo Sapien

<400> 64

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tcaacctcct gcaggtctcg gagccctcgg agccatgtgt gagatacctg 200
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tgaaggacaa agcacggaag ctgtacacca tcatgaactc gttctgcagg 350
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cccagtgtact acggtcctgc cagatcgtca gcgctaaggg aactgagacc 450
agagaaaagaa cccaagagaa ctaaagttat gtcagctacc cagacttaat 500
ggcccgagac catgaccctc acaggtcttg tgtagtgtt atctgaaact 550
gttatgtatc tctctacctt ctggaaaaca gggctggat tcctacccag 600
gaacctccctt tgagcataga gtttagcaacc atgcttctca ttcccttgac 650

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tcatgtcttg ccaggatgg tagatacaca gcatgttgat ttggtaacta 700  
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gaacatgcac aatagtatgt ttttattact ggtaatgg agtaatggta 800  
cttttattct ttcttgatag aaacctgctt acatccaacc aagcttctat 850  
tatgccttt tctaacadag actttttca ctgtcttca tttaaaaaga 900  
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<210> 65

<211> 136

<212> PRT

<213> Homo Sapien

<400> 65

Met	Arg	Thr	Pro	Gly	Pro	Leu	Pro	Val	Leu	Leu	Leu	Leu	Ala
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Gly	Ala	Pro	Ala	Ala	Arg	Pro	Thr	Pro	Pro	Thr	Cys	Tyr	Ser	Arg
													30	

Met	Arg	Ala	Leu	Ser	Gln	Glu	Ile	Thr	Arg	Asp	Phe	Asn	Leu	Leu
													45	

Gln	Val	Ser	Glu	Pro	Ser	Glu	Pro	Cys	Val	Arg	Tyr	Leu	Pro	Arg
													60	

Leu	Tyr	Leu	Asp	Ile	His	Asn	Tyr	Cys	Val	Leu	Asp	Lys	Leu	Arg
													75	

Asp	Phe	Val	Ala	Ser	Pro	Pro	Cys	Trp	Lys	Val	Ala	Gln	Val	Asp
													90	

Ser	Leu	Lys	Asp	Lys	Ala	Arg	Lys	Leu	Tyr	Thr	Ile	Met	Asn	Ser
													105	

Phe	Cys	Arg	Arg	Asp	Leu	Val	Phe	Leu	Leu	Asp	Asp	Cys	Asn	Ala
													120	

Leu	Glu	Tyr	Pro	Ile	Pro	Val	Thr	Thr	Val	Leu	Pro	Asp	Arg	Gln
													135	

Arg

<210> 66

<211> 1893

<212> DNA

<213> Homo Sapien

<400> 66

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ccccacaccc accctcctgg ctcttcctgt ttttactcct cctttcatt 200  
cataacaaaa gctacagctc caggagccca gcgcgggct gtgacccaag 250  
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atctctacat aatagagaat taagtgcaga aagaccttg aatgaacaga 400  
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aaacttggat gaaatgattt ctcttcagac caaaaacaag ctagaaaaaa 1300  
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catgaagaaa cagacagtac caaggaagaa gcagctaaga tggaaaagga 1400  
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gaaagacaga tgaacccaaa ggaaaaacag aagccttattt ggaagccatc 1500

agaaaaaaaata ttgaatggc ttgaaacat gacaaaaagg gaaataaaga 1550  
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accttttaca agtggtaaa acatagctt cttcccgtaa aaactatctg 1850  
aaagtaaaagt tgtatgttaag ctgaaaaaaaaaaaaaaa aaa 1893

<210> 67

<211> 468

<212> PRT

<213> Homo Sapien

<400> 67

Met	Gly	Phe	Leu	Gly	Thr	Gly	Thr	Trp	Ile	Leu	Val	Leu	Val	Leu
1									10					15
Pro	Ile	Gln	Ala	Phe	Pro	Lys	Pro	Gly	Gly	Ser	Gln	Asp	Lys	Ser
									25					30
Leu	His	Asn	Arg	Glu	Leu	Ser	Ala	Glu	Arg	Pro	Leu	Asn	Glu	Gln
									40					45
Ile	Ala	Glu	Ala	Glu	Glu	Asp	Lys	Ile	Lys	Lys	Thr	Tyr	Pro	Pro
									55					60
Glu	Asn	Lys	Pro	Gly	Gln	Ser	Asn	Tyr	Ser	Phe	Val	Asp	Asn	Leu
									70					75
Asn	Leu	Leu	Lys	Ala	Ile	Thr	Glu	Lys	Glu	Lys	Ile	Glu	Lys	Glu
									85					90
Arg	Gln	Ser	Ile	Arg	Ser	Ser	Pro	Leu	Asp	Asn	Lys	Leu	Asn	Val
									100					105
Glu	Asp	Val	Asp	Ser	Thr	Lys	Asn	Arg	Lys	Leu	Ile	Asp	Asp	Tyr
									115					120
Asp	Ser	Thr	Lys	Ser	Gly	Leu	Asp	His	Lys	Phe	Gln	Asp	Asp	Pro
									130					135
Asp	Gly	Leu	His	Gln	Leu	Asp	Gly	Thr	Pro	Leu	Thr	Ala	Glu	Asp
									145					150
Ile	Val	His	Lys	Ile	Ala	Ala	Arg	Ile	Tyr	Glu	Glu	Asn	Asp	Arg
									155					165
Ala	Val	Phe	Asp	Lys	Ile	Val	Ser	Lys	Leu	Leu	Asn	Leu	Gly	Leu
									170					180
									175					

Ile	Thr	Glu	Ser	Gln	Ala	His	Thr	Leu	Glu	Asp	Glu	Val	Ala	Glu
				185				190					195	
Val	Leu	Gln	Lys	Leu	Ile	Ser	Lys	Glu	Ala	Asn	Asn	Tyr	Glu	Glu
	200						205					210		
Asp	Pro	Asn	Lys	Pro	Thr	Ser	Trp	Thr	Glu	Asn	Gln	Ala	Gly	Lys
	215							220				225		
Ile	Pro	Glu	Lys	Val	Thr	Pro	Met	Ala	Ala	Ile	Gln	Asp	Gly	Leu
	230							235				240		
Ala	Lys	Gly	Glu	Asn	Asp	Glu	Thr	Val	Ser	Asn	Thr	Leu	Thr	Leu
	245							250				255		
Thr	Asn	Gly	Leu	Glu	Arg	Arg	Thr	Lys	Thr	Tyr	Ser	Glu	Asp	Asn
	260							265				270		
Phe	Glu	Glu	Leu	Gln	Tyr	Phe	Pro	Asn	Phe	Tyr	Ala	Leu	Leu	Lys
	275							280				285		
Ser	Ile	Asp	Ser	Glu	Lys	Glu	Ala	Lys	Glu	Lys	Glu	Thr	Leu	Ile
	290							295				300		
Thr	Ile	Met	Lys	Thr	Leu	Ile	Asp	Phe	Val	Lys	Met	Met	Val	Lys
	305							310				315		
Tyr	Gly	Thr	Ile	Ser	Pro	Glu	Glu	Gly	Val	Ser	Tyr	Leu	Glu	Asn
	320							325				330		
Leu	Asp	Glu	Met	Ile	Ala	Leu	Gln	Thr	Lys	Asn	Lys	Leu	Glu	Lys
	335							340				345		
Asn	Ala	Thr	Asp	Asn	Ile	Ser	Lys	Leu	Phe	Pro	Ala	Pro	Ser	Glu
	350							355				360		
Lys	Ser	His	Glu	Glu	Thr	Asp	Ser	Thr	Lys	Glu	Glu	Ala	Ala	Lys
	365							370				375		
Met	Glu	Lys	Glu	Tyr	Gly	Ser	Leu	Lys	Asp	Ser	Thr	Lys	Asp	Asp
	380							385				390		
Asn	Ser	Asn	Pro	Gly	Gly	Lys	Thr	Asp	Glu	Pro	Lys	Gly	Lys	Thr
	395							400				405		
Glu	Ala	Tyr	Leu	Glu	Ala	Ile	Arg	Lys	Asn	Ile	Glu	Trp	Leu	Lys
	410							415				420		
Lys	His	Asp	Lys	Lys	Gly	Asn	Lys	Glu	Asp	Tyr	Asp	Leu	Ser	Lys
	425							430				435		
Met	Arg	Asp	Phe	Ile	Asn	Lys	Gln	Ala	Asp	Ala	Tyr	Val	Glu	Lys
	440							445				450		
Gly	Ile	Leu	Asp	Lys	Glu	Glu	Ala	Glu	Ala	Ile	Lys	Arg	Ile	Tyr
	455							460				465		
Ser	Ser	Leu												

<210> 68  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 68  
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<210> 69  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 69  
gtcttggctt cctccaggtt tgg 23

<210> 70  
<211> 38  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 70  
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<210> 71  
<211> 2379  
<212> DNA  
<213> Homo Sapien

<400> 71  
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gctgctcctg ccagcccttc tgagctcagg ttggggggag ttggagccac 150  
aaatacatgg tcagacctgg gctgagcggg cacttcggga gaatgaacgc 200  
cacgccttca cctgcccgggt ggcagggggg cctggcaccc ccagattggc 250  
ctggtatctg gatggacagc tgcaggaggc cagcacctca agactgctga 300  
gcgtgggagg ggaggcccttc tctggaggca ccagcacctt cactgtcact 350  
gcccatcggg cccagcatga gctcaactgc tctctgcagg accccagaag 400  
tggccgatca gccaacgcct ctgtcatcct taatgtcaa ttcaagccag 450

agattgccca agtcggcgcc aagtaccagg aagctcaggg cccaggcctc 500  
ctgggtgtcc tgtttgcctt ggtgcgtgcc aacccgcccgg ccaatgtcac 550  
ctggatcgac caggatggc cagtgactgt caacacctct gacttcctgg 600  
tgctggatgc gcagaactac ccctggctca ccaaccacac ggtgcagctg 650  
cagctccgca gcctggcaca caacctctcg gtggtgccca ccaatgacgt 700  
gggtgtcacc agtgcgtcgc ttccagcccc aggcccctcc cgccacccat 750  
ctctgatatac aagtgactcc aacaacctaa aactcaacaa cgtgcgcctg 800  
ccacgggaga acatgtccct cccgtccaac cttagtgcata atgacctcac 850  
tccagattcc agagcagtga aaccagcaga cccgcagatg gctcagaaca 900  
acagccggcc agagcttctg gacccggagc cccgcggcct cctcaccagc 950  
caaggtttca tccgcctccc agtgcgtggc tatatactatc gagtgtccag 1000  
cgtgagcagt gatgagatct ggctctgagc cgagggcgag acaggagat 1050  
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ttccagaggg agctcttgg ccaggggtgt tcagatgtca tccagcatcc 1350  
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tctgggattc actgtgagtg tcctgagctc tcggggttga tggttttct 1950  
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ccacataccc caaagtgacc taagaacact ttaaaaagca acatgtaaat 2150  
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cttttgtaat gttttcatg ttactgccta gggcggtgct gagcacacag 2250  
caagtttaat aaacttgact gaattcattt aaaaaaaaaa aaaaaaaaaa 2300  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2350  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaa 2379

<210> 72

<211> 322

<212> PRT

<213> Homo Sapien

<400> 72

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Leu	Leu	Pro	Ala	Leu	Leu	Ser	Ser	Gly	Trp	Gly	Glu	Leu	Glu	Pro
				20					25					30
Gln	Ile	Asp	Gly	Gln	Thr	Trp	Ala	Glu	Arg	Ala	Leu	Arg	Glu	Asn
				35				40						45
Glu	Arg	His	Ala	Phe	Thr	Cys	Arg	Val	Ala	Gly	Gly	Pro	Gly	Thr
				50				55						60
Pro	Arg	Leu	Ala	Trp	Tyr	Leu	Asp	Gly	Gln	Leu	Gln	Glu	Ala	Ser
				65				70						75
Thr	Ser	Arg	Leu	Leu	Ser	Val	Gly	Gly	Glu	Ala	Phe	Ser	Gly	Gly
					80			85						90
Thr	Ser	Thr	Phe	Thr	Val	Thr	Ala	His	Arg	Ala	Gln	His	Glu	Leu
				95				100						105
Asn	Cys	Ser	Leu	Gln	Asp	Pro	Arg	Ser	Gly	Arg	Ser	Ala	Asn	Ala
				110				115						120
Ser	Val	Ile	Leu	Asn	Val	Gln	Phe	Lys	Pro	Glu	Ile	Ala	Gln	Val
				125				130						135
Gly	Ala	Lys	Tyr	Gln	Glu	Ala	Gln	Gly	Pro	Gly	Leu	Leu	Val	Val
				140				145						150
Leu	Phe	Ala	Leu	Val	Arg	Ala	Asn	Pro	Pro	Ala	Asn	Val	Thr	Trp
				155				160						165

Ile	Asp	Gln	Asp	Gly	Pro	Val	Thr	Val	Asn	Thr	Ser	Asp	Phe	Leu
					170				175					180
Val	Leu	Asp	Ala	Gln	Asn	Tyr	Pro	Trp	Leu	Thr	Asn	His	Thr	Val
					185				190					195
Gln	Leu	Gln	Leu	Arg	Ser	Leu	Ala	His	Asn	Leu	Ser	Val	Val	Ala
					200				205					210
Thr	Asn	Asp	Val	Gly	Val	Thr	Ser	Ala	Ser	Leu	Pro	Ala	Pro	Gly
					215				220					225
Pro	Ser	Arg	His	Pro	Ser	Leu	Ile	Ser	Ser	Asp	Ser	Asn	Asn	Leu
					230				235					240
Lys	Leu	Asn	Asn	Val	Arg	Leu	Pro	Arg	Glu	Asn	Met	Ser	Leu	Pro
					245				250					255
Ser	Asn	Leu	Gln	Leu	Asn	Asp	Leu	Thr	Pro	Asp	Ser	Arg	Ala	Val
					260				265					270
Lys	Pro	Ala	Asp	Arg	Gln	Met	Ala	Gln	Asn	Asn	Ser	Arg	Pro	Glu
					275				280					285
Leu	Leu	Asp	Pro	Glu	Pro	Gly	Gly	Leu	Leu	Thr	Ser	Gln	Gly	Phe
					290				295					300
Ile	Arg	Leu	Pro	Val	Leu	Gly	Tyr	Ile	Tyr	Arg	Val	Ser	Ser	Val
					305				310					315
Ser	Ser	Asp	Glu	Ile	Trp	Leu								
					320									

<210> 73  
 <211> 843  
 <212> DNA  
 <213> Homo Sapien

<400> 73  
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 tgctgctggc gctgttagtg ccgggcggtg gtgccgcca aaccggtgcg 150  
 gagctcgtga cctgcgggtc ggtgctgaag ctgctcaata cgccaccacgg 200  
 cgtgcggctg cactcgacag acatcaaata cggatccggc agcggccacgc 250  
 aatcggtgac cggcgtagag gcgtcggacg acgccaatag ctactggcg 300  
 atcccgccggc gtcggaggg cgggtgcccc cgccgggtccc cggtgcgctg 350  
 cgggcaggcg gtgaggctca cgcatgtgct tacggcaag aacctgcaca 400  
 cgcaccactt cccgtcgccg ctgtccaaca accaggaggt gagtgccttt 450  
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tggacagcac tgggagcgtg aggctgctgt gcgcctccag catgtggca 550  
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gaaggccatg gaaggcatct tcataagcc tagtgtggag ccctctgcag 700  
gtcacgatga actctgagtg tgtggatgga tgggtggatg gagggtggca 750  
ggtggggcgt ctgcagggcc actcttggca gagacttgg gtttgttaggg 800  
gtcctaagt gccttgtga ttaaagaatg ttggtctatg aaa 843

<210> 74  
<211> 221  
<212> PRT  
<213> Homo Sapien

<400> 74

Met	Trp	Ser	Ala	Gly	Arg	Gly	Gly	Ala	Ala	Trp	Pro	Val	Leu	Leu
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Gly	Leu	Leu	Leu	Ala	Leu	Leu	Val	Pro	Gly	Gly	Gly	Ala	Ala	Lys
	20						25						30	
Thr	Gly	Ala	Glu	Leu	Val	Thr	Cys	Gly	Ser	Val	Leu	Lys	Leu	Leu
	35					40						45		
Asn	Thr	His	His	Arg	Val	Arg	Leu	His	Ser	His	Asp	Ile	Lys	Tyr
	50						55					60		
Gly	Ser	Gly	Ser	Gly	Gln	Gln	Ser	Val	Thr	Gly	Val	Glu	Ala	Ser
	65						70					75		
Asp	Asp	Ala	Asn	Ser	Tyr	Trp	Arg	Ile	Arg	Gly	Gly	Ser	Glu	Gly
	80						85					90		
Gly	Cys	Pro	Arg	Gly	Ser	Pro	Val	Arg	Cys	Gly	Gln	Ala	Val	Arg
	95						100					105		
Leu	Thr	His	Val	Leu	Thr	Gly	Lys	Asn	Leu	His	Thr	His	His	Phe
	110						115					120		
Pro	Ser	Pro	Leu	Ser	Asn	Asn	Gln	Glu	Val	Ser	Ala	Phe	Gly	Glu
			125					130					135	
Asp	Gly	Glu	Gly	Asp	Asp	Leu	Asp	Leu	Trp	Thr	Val	Arg	Cys	Ser
	140							145					150	
Gly	Gln	His	Trp	Glu	Arg	Glu	Ala	Ala	Val	Arg	Phe	Gln	His	Val
			155					160					165	
Gly	Thr	Ser	Val	Phe	Leu	Ser	Val	Thr	Gly	Glu	Gln	Tyr	Gly	Ser
	170						175					180		
Pro	Ile	Arg	Gly	Gln	His	Glu	Val	His	Gly	Met	Pro	Ser	Ala	Asn
	185						190					195		

Thr His Asn Thr Trp Lys Ala Met Glu Gly Ile Phe Ile Lys Pro  
200 205 210

Ser Val Glu Pro Ser Ala Gly His Asp Glu Leu  
215 220

<210> 75

<211> 1049

<212> DNA

<213> Homo Sapien

<400> 75

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ttggatgaga tgaacacttt taacaagaga acaggactct atataaatcg 150  
ctgtgggctc accacacctta aggaggagca ctgactgaag acagaaaaat 200  
tgatgaactg aagaagacat ggtccattat gccttacaaa cttacacagt 250  
gcttggaa ttccaaagta ctcagtggag agaggtgttt caggagccgt 300  
agagccagat cgtcatcatg tctgcattgt ggctgctgct gggcctcctt 350  
gccctgatgg acttgtctga aagcagcaac tggggatgct atgaaacat 400  
ccaaaggctg gacaccctg gagcatcttgc tgggattgga agacgtcacg 450  
gcctgaacta ctgtggagtt cgtgcttctg aaaggctggc tgaatagac 500  
atgccatacc tcctgaaata tcaacccatg atgcaaacca ttggccaaaa 550  
gtactgcatg gatcctgccc tgcattgtgg tgtcttgcc aggaagtctc 600  
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gaccctggct ctcaagctcc cacatcctgg attagttagt ctcaggttcc 700  
ccagacaact gaagttctga ctactagaat caaagaaatc cagaggaggt 750  
ttccaacctg gaccctgac cagtagctga gaggtggact ctgtgcctac 800  
agtgggggtg ctggctatgt ccgaagcagc caggacctga gctgtgactt 850  
ctgcaatgat gtcattgcac gagccaagta cctcaagaga catggcttct 900  
aacatctcag atgaaaccca agaccatgat cacatatgca gcctcaaattg 950  
ttacacagat aaaactagcc aagggcacct gtaactggta atctgagttt 1000  
gacctaaaag tcattaaaat aacatgaatc ccattaaaaaa aaaaaaaaaa 1049

<210> 76

<211> 194

<212> PRT

<213> Homo Sapien

<400> 76

Met	Ser	Ala	Leu	Trp	Leu	Leu	Gly	Leu	Leu	Ala	Leu	Met	Asp	
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Leu	Ser	Glu	Ser	Ser	Asn	Trp	Gly	Cys	Tyr	Gly	Asn	Ile	Gln	Ser
			20				25					30		
Leu	Asp	Thr	Pro	Gly	Ala	Ser	Cys	Gly	Ile	Gly	Arg	Arg	His	Gly
			35				40					45		
Leu	Asn	Tyr	Cys	Gly	Val	Arg	Ala	Ser	Glu	Arg	Leu	Ala	Glu	Ile
			50				55					60		
Asp	Met	Pro	Tyr	Leu	Leu	Lys	Tyr	Gln	Pro	Met	Met	Gln	Thr	Ile
			65				70					75		
Gly	Gln	Lys	Tyr	Cys	Met	Asp	Pro	Ala	Val	Ile	Ala	Gly	Val	Leu
			80				85					90		
Ser	Arg	Lys	Ser	Pro	Gly	Asp	Lys	Ile	Leu	Val	Asn	Met	Gly	Asp
			95				100					105		
Arg	Thr	Ser	Met	Val	Gln	Asp	Pro	Gly	Ser	Gln	Ala	Pro	Thr	Ser
			110				115					120		
Trp	Ile	Ser	Glu	Ser	Gln	Val	Ser	Gln	Thr	Thr	Glu	Val	Leu	Thr
			125				130					135		
Thr	Arg	Ile	Lys	Glu	Ile	Gln	Arg	Arg	Phe	Pro	Thr	Trp	Thr	Pro
			140				145					150		
Asp	Gln	Tyr	Leu	Arg	Gly	Gly	Leu	Cys	Ala	Tyr	Ser	Gly	Gly	Ala
			155				160					165		
Gly	Tyr	Val	Arg	Ser	Ser	Gln	Asp	Leu	Ser	Cys	Asp	Phe	Cys	Asn
			170				175					180		
Asp	Val	Leu	Ala	Arg	Ala	Lys	Tyr	Leu	Lys	Arg	His	Gly	Phe	
			185				190							

<210> 77  
<211> 899  
<212> DNA  
<213> Homo Sapien

<400> 77

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ctgtgtggac	cggcagtcc	gccgcctgga	gccaggacag	caatgcctga	200
caacacatgc	ataccttgg	aagatgtgg	ttttctccaa	tctgcgtgt	250
ggcacacccag	aagagccctg	tcaggaggcc	ttcaacccaaa	ccaaccgcaa	300

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ccagtgaagg ctcccacaag gacctgatga cctcactgta cagagctgac 800  
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tccatttga gtaataaaatg tctgagtctg gaaaaaaaaaaa aaaaaaaaaa 899

<210> 78  
<211> 125  
<212> PRT  
<213> Homo Sapien

<400> 78  
Met Lys Ala Leu Met Leu Leu Thr Leu Ser Val Leu Leu Cys Trp  
1 5 10 15  
Val Ser Ala Asp Ile Arg Cys His Ser Cys Tyr Lys Val Pro Val  
20 25 30  
Leu Gly Cys Val Asp Arg Gln Ser Cys Arg Leu Glu Pro Gly Gln  
35 40 45  
Gln Cys Leu Thr Thr His Ala Tyr Leu Gly Lys Met Trp Val Phe  
50 55 60  
Ser Asn Leu Arg Cys Gly Thr Pro Glu Glu Pro Cys Gln Glu Ala  
65 70 75  
Phe Asn Gln Thr Asn Arg Lys Leu Gly Leu Thr Tyr Asn Thr Thr  
80 85 90  
Cys Cys Asn Lys Asp Asn Cys Asn Ser Ala Gly Pro Arg Pro Thr  
95 100 105  
Pro Ala Leu Gly Leu Val Phe Leu Thr Ser Leu Ala Gly Leu Gly  
110 115 120  
Leu Trp Leu Leu His  
125

<210> 79

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<211> 1977  
<212> DNA  
<213> Homo Sapien

<400> 79  
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tagctgcgca gcgtcgcgcg cgctaccgca cccaggtcg gcccgttaggc 150  
gtctggcagc ccggcgccat cttcatcgag cgccatggcc gcagcctgctg 200  
ggccgggagc ggccgggtac tgcttgctcc tcggcttgca ttgtttctg 250  
ctgaccgcgg gccctgcctt gggctggaac gaccctgaca gaatgttgc 300  
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gcaggctgga tccccatccca cagttgaaat gtgttgagg cacagctgg 400  
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aatttggaaa aactgtggtg agctgtgaag gctatgagtc ctctgaagac 550  
cagtatgtac taagaggttc ttgtggcttg gagtataatt tagattatac 600  
agaacttggc ctgcagaaac tgaaggagtc tggaaagcag cacggctttg 650  
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agggatatt caaaagtct gtgggttat gtccagtgta gcttttgta 1350

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aatttcagtt ttaggtgggtt gtagctgatg agttattacc tcatalogac 1600  
tataatattc tatttggat tatattattt gatgttgct gttttcaaa 1650  
catttaaatc aagctttgga ctaattatgc taatttgc gttctgatca 1700  
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tttcttcgt tcataagagg taaaggtcaa attttcaac aaaagtcttt 1900  
taataacaaa agcatgcagt tctctgtgaa atctcaaata ttgttgaat 1950  
agtctgttcc aatctaaaaa agaatca 1977

<210> 80  
<211> 339  
<212> PRT  
<213> Homo Sapien  
  
<400> 80  
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20 25 30  
Trp Asn Asp Pro Asp Arg Met Leu Leu Arg Asp Val Lys Ala Leu  
35 40 45  
Thr Leu His Tyr Asp Arg Tyr Thr Thr Ser Arg Arg Leu Asp Pro  
50 55 60  
Ile Pro Gln Leu Lys Cys Val Gly Gly Thr Ala Gly Cys Asp Ser  
65 70 75  
Tyr Thr Pro Lys Val Ile Gln Cys Gln Asn Lys Gly Trp Asp Gly  
80 85 90  
Tyr Asp Val Gln Trp Glu Cys Lys Thr Asp Leu Asp Ile Ala Tyr  
95 100 105  
Lys Phe Gly Lys Thr Val Val Ser Cys Glu Gly Tyr Glu Ser Ser  
110 115 120  
Glu Asp Gln Tyr Val Leu Arg Gly Ser Cys Gly Leu Glu Tyr Asn  
125 130 135

Leu Asp Tyr Thr Glu Leu Gly Leu Gln Lys Leu Lys Glu Ser Gly  
140 145 150

Lys Gln His Gly Phe Ala Ser Phe Ser Asp Tyr Tyr Tyr Lys Trp  
155 160 165

Ser Ser Ala Asp Ser Cys Asn Met Ser Gly Leu Ile Thr Ile Val  
170 175 180

Val Leu Leu Gly Ile Ala Phe Val Val Tyr Lys Leu Phe Leu Ser  
185 190 195

Asp Gly Gln Tyr Ser Pro Pro Pro Tyr Ser Glu Tyr Pro Pro Phe  
200 205 210

Ser His Arg Tyr Gln Arg Phe Thr Asn Ser Ala Gly Pro Pro Pro  
215 220 225

Pro Gly Phe Lys Ser Glu Phe Thr Gly Pro Gln Asn Thr Gly His  
230 235 240

Gly Ala Thr Ser Gly Phe Gly Ser Ala Phe Thr Gly Gln Gln Gly  
245 250 255

Tyr Glu Asn Ser Gly Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly  
260 265 270

Gly Ile Leu Gly Tyr Leu Phe Gly Ser Asn Arg Ala Ala Thr Pro  
275 280 285

Phe Ser Asp Ser Trp Tyr Tyr Pro Ser Tyr Pro Pro Ser Tyr Pro  
290 295 300

Gly Thr Trp Asn Arg Ala Tyr Ser Pro Leu His Gly Gly Ser Gly  
305 310 315

Ser Tyr Ser Val Cys Ser Asn Ser Asp Thr Lys Thr Arg Thr Ala  
320 325 330

Ser Gly Tyr Gly Gly Thr Arg Arg Arg  
335